

Research Article



THE ACUPUNCTURE TREATMENT IN A PATIENT WITH URINARY TRACT INFECTION AT SEHAT KANIDEE CLINIC IN BOGOR CITY

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ABSTRACT

Background:

Background: Urinary tract infection (UTI) is a common infectious disease with a high risk of recurrence and potential complications if not properly managed. In addition to pharmacological treatment, safe complementary approaches may help support symptom improvement. Acupuncture is a complementary therapy that has been applied in various urinary system disorders. This study aimed to explore the benefits of acupuncture care for a patient with UTI at Klinik Sehat Kanidee, Bogor.

Methods: A clinical case study design with a descriptive qualitative approach was used. The subject was one patient diagnosed with UTI. Acupuncture therapy was administered in six sessions, twice weekly. Diagnosis and evaluation were conducted using the four diagnostic methods of Traditional Chinese Medicine.

Results: Outcome measures included changes in dysuria, urinary frequency, sensation of incomplete voiding, and overall patient condition. After six sessions, the patient showed gradual improvement in the main UTI symptoms. Dysuria and the sensation of incomplete voiding resolved, urinary frequency returned to normal, and the general condition improved. From an acupuncture perspective, improvement in Spleen and Kidney Qi deficiency syndrome was observed.

Conclusion: Conclusion: Acupuncture may provide clinical benefits and can be considered a complementary therapy in UTI management.

Keywords: *Acupuncture; urinary tract infection; complementary therapy; case study; traditional medicine*

INTRODUCTION

Urinary tract infection (UTI) is one of the most common bacterial infections encountered in both primary and specialized healthcare settings, contributing substantially to morbidity among adults, particularly women (1,2). Clinically, UTI may involve the urethra, bladder, ureters, or kidneys, and is typically characterized by dysuria, urinary urgency, increased frequency of urination, and sometimes fever. Standard management of acute UTI generally relies on antibiotic therapy. However, the growing global challenge of antimicrobial resistance has encouraged the exploration of complementary therapeutic approaches to support symptom management and reduce recurrence (3).

Acupuncture is a complementary therapy that has been widely applied in various clinical conditions, including disorders of the urinary system. Several studies suggest that acupuncture may influence autonomic nervous system responses and pain modulation, which could contribute to the regulation of bladder function and inflammatory processes (4). Clinical evidence regarding the role of acupuncture in UTI management has mainly focused on prophylaxis and the reduction of recurrent infections. Randomized clinical trials involving women with recurrent UTI have reported that acupuncture reduced the incidence of UTI episodes compared with no treatment or sham acupuncture, indicating a potential medium- to long-term protective effect. More recent trials using segmental acupuncture approaches have also demonstrated a higher proportion of UTI-free patients after 12 months compared with control groups (5). In addition, large retrospective cohort studies in stroke patients have shown a lower risk of UTI among those

receiving acupuncture during long-term follow-up.

Despite these promising findings, many studies still present methodological limitations, including small sample sizes and variations in acupuncture protocols. Therefore, further investigation is needed to strengthen the evidence base and clarify the mechanisms of acupuncture in the context of UTI. This study aimed to evaluate the benefits of acupuncture care in a patient with urinary tract infection at Klinik Sehat Kanidee, Bogor, as a contribution to the scientific understanding of evidence-based complementary therapy.

MATERIAL AND METHODS

Study Design

This study employed a clinical case study design with a descriptive qualitative approach to document and evaluate acupuncture care in a patient with urinary tract infection (UTI). The case study design was selected to provide an in-depth description of the acupuncture diagnostic process, therapeutic planning, intervention implementation, and the patient's ongoing clinical response. Case reporting followed general principles for reporting non-pharmacological clinical interventions and standards of acupuncture practice (6,7).

Participant and Setting

The participant was one adult patient diagnosed with UTI who received treatment at Klinik Sehat Kanidee, Bogor. Inclusion criteria were: (1) confirmed diagnosis of UTI, (2) age between 20–50 years, (3) willingness to complete the full course of acupuncture therapy, and (4) provision of written informed consent. Exclusion criteria included severe complications, uncontrolled

systemic diseases, or concurrent invasive treatments.

The study was conducted at Klinik Sehat Kanidee, Bogor, from October to December 2025. Acupuncture intervention was administered twice weekly for six weeks.

Data Collection Procedures

Data were collected through:

Comprehensive acupuncture examination based on the four diagnostic methods of Traditional Chinese Medicine (inspection, listening/smelling, inquiry, and palpation), recorded in a structured clinical form; Review of supporting medical data, including medical records and laboratory results when available; Observation of therapeutic response, focusing on changes in main symptoms such as dysuria and urinary frequency at each treatment session.; Collected data were reduced and organized to identify diagnostically relevant information for establishing the acupuncture diagnosis (8).

Acupuncture Diagnosis and Intervention

Acupuncture diagnosis was established through integration of findings from the four diagnostic methods. The diagnosis included identification of the disease category (Lin Zheng/stranguria) and the underlying syndrome pattern, which guided therapeutic principles and strategies. The intervention protocol included: determination of treatment principles; selection of acupuncture points based on syndrome differentiation; needling and manipulation techniques; needle retention duration, and treatment scheduling.

All procedures were conducted according to safety principles and standards of clinical acupuncture practice, including equipment preparation, decontamination, use

of personal protective equipment, and risk management.

Evaluation and Data Analysis

Evaluation was performed at each session through: Process evaluation, assessing immediate clinical responses following acupuncture treatment; Outcome evaluation, assessing changes in key symptoms across treatment sessions. Data were analyzed descriptively by comparing the patient's baseline condition with clinical changes observed throughout the course of therapy.

Ethical Considerations

This study received permission from Klinik Sehat Kanidee, Bogor. All procedures were conducted with the participant's written informed consent, with strict protection of patient confidentiality and adherence to ethical principles in health research.

RESULTS

Acupuncture therapy was administered to the patient with urinary tract infection (UTI) over six sessions, twice weekly (4,9,10). Initial assessment using the four diagnostic methods of Traditional Chinese Medicine revealed complaints of dysuria, increased urinary frequency, sensation of incomplete voiding, lower back pain, fatigue, and decreased appetite. Tongue examination showed a pale tongue with a thin white coating, while pulse examination indicated a weak pulse. Based on these findings, the acupuncture diagnosis was determined as cystitis with a syndrome pattern of Spleen and Kidney Qi deficiency (11,12).

The treatment principles focused on tonifying Spleen and Kidney Qi, improving bladder function, and relieving stranguria-

related symptoms (13). A summary of the acupuncture management protocol is presented in Table 1.

Continuous clinical evaluation was conducted at each treatment session. The progression of the patient’s main symptoms demonstrated gradual improvement, particularly in dysuria, urinary frequency, and the sensation of incomplete voiding (4,5,9). A summary of the patient’s clinical changes across treatment sessions is presented in Table.2

Tabel 1. Summary of Acupuncture Treatment Protocol.

Component	Description
Acupuncture Diagnosis	Cystitis (Urinary Tract Infection) with Spleen and Kidney Qi Deficiency Syndrome
Number of Sessions	6 sessions
Therapy Frequency	Twice per week
Therapeutic Principle	Strengthening Spleen and Kidney Qi, tonifying the Kidneys, and relieving stranguria
Acupuncture Points	BL20 (Pishu), BL23 (Shenshu), RN3 (Zhongji), RN4 (Guanyuan), ST36 (Zusanli), SP6 (Sanyinjiao), DU4 (Mingmen), RN12 (Zhongwan)
Technique	Tonification
Needle Retention Time	Approximately 20–30 minutes per session

Table 2. Progression of the Patient’s Clinical Symptoms During Acupuncture Therapy

Evaluation Stage	Pain	Urination Frequency	Incomplete Emptying Sensation	Lower Back Pain	General Condition
Before therapy	Present	High	Present	Present	Easily fatigued
Session 3	Reduced	Decreased	Still present	Reduced	Beginning to improve
Session 6	Absent	Normal	Absent	Absent	Good

At the end of the sixth treatment session, the patient reported complete resolution of dysuria, normalization of urinary frequency, and absence of the sensation of incomplete voiding. The patient’s general condition also improved, as indicated by increased appetite and reduced fatigue.

DISCUSSION

Urinary tract infection (UTI) remains one of the most frequently encountered infectious diseases in clinical practice, affecting the kidneys, ureters, bladder, or urethra(14,15). The global burden of UTI is substantial, with millions of cases reported annually, and a higher prevalence among women due to anatomical and physiological factors (1). In addition, widespread antibiotic use and the increasing problem of antimicrobial resistance contribute to the persistence and recurrence of UTI, highlighting the need for safe complementary therapeutic options (3,16).

In this case study, the patient experienced gradual improvement in key UTI symptoms following six sessions of acupuncture therapy. Dysuria and the sensation of incomplete voiding resolved, urinary frequency returned to normal, and the patient’s general condition improved. These findings are consistent with previous reports suggesting that acupuncture may influence urinary function through modulation of the autonomic nervous system and regulation of inflammatory responses. Such mechanisms may contribute to reduced urinary discomfort and improved bladder regulation.

From a Traditional Chinese Medicine perspective, the patient’s condition was associated with Spleen and Kidney Qi deficiency, which is believed to impair fluid transformation and bladder function. The

selected treatment principles—tonifying Spleen and Kidney Qi and relieving stranguria—were followed by progressive symptom relief, suggesting that syndrome-based acupuncture management may have therapeutic relevance in UTI-related complaints.

Although encouraging, the findings of this study should be interpreted with caution. As a single-case design, the results cannot be generalized to broader populations. Variations in individual response, the absence of a control comparison, and the limited duration of observation restrict the strength of conclusions regarding effectiveness. Nevertheless, this case provides preliminary clinical insight into the potential role of acupuncture as a complementary approach in UTI management and supports the need for further research with more rigorous study designs and larger sample sizes.

CONCLUSION

This case study indicates that acupuncture care may provide clinical benefits for a patient with urinary tract infection. Six sessions of acupuncture therapy were associated with gradual improvement in key urinary symptoms, particularly dysuria, urinary frequency, and the sensation of incomplete voiding. Improvements were also observed in the patient's general condition, including reduced lower back pain, improved appetite, and increased energy, along with changes in acupuncture findings consistent with improvement in Spleen and Kidney Qi deficiency syndrome.

Although limited to a single case, these findings suggest that acupuncture has potential as a complementary therapy in UTI management. Further studies with stronger

research designs, larger sample sizes, and more comprehensive outcome measures are needed to strengthen the evidence base for acupuncture in the management of urinary tract infections.

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